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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,695	08/05/2002	Roy Auerbach	USPL-77	3744

7590

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EXAMINER

MAHONEY, CHRISTOPHER E

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 03/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,695

Applicant(s)

AUERBACH ET AL.

Examiner

Christopher E Mahoney

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-7 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by van de Ven (U.S. Patent No. 4,666,248). van de Ven teaches a rear projection screen for a rear projection display comprising a Fresnel lens 20, a lenslet array 17, which may be comprised of anamorphic lenses, apertures 15, and a protective coating layer 11. As discussed in col. 11, lines 31-35, the screen is used with a convention slide or film projector which will have an exit pupil from which images will be projected. The projected images then enter the Fresnel lens 20 on the light entering side 12 of the screen. The Fresnel lens changes the light beam projected by the exit pupil from a divergent beam to a collimated beam. (col. 2, lines 40-43). The collimated beam then enters the lenses 17 to be converged at the holes 15. (col. 4, lines 46-49). Thus the holes are at location which correspond to the images of the exit pupil formed by the combination of the Fresnel structure and the lenslet array. As described at col. 1, lines 67 to col. 2, line 2 this is done for the purpose of ensuring “that a maximum amount of light from the primary image-source reaches the viewing space and which minimizes reflections of ambient light to the viewing space.”

Art Unit: 2851

Claims 1, 6-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper, Jr. (U.S. Patent No. 3,580,611). Cooper, Jr. teaches a rear projection screen for a rear projection display comprising a Fresnel lens 48, a lenslet array 58, which may be comprised of anamorphic lenses, apertures 62, and a protective coating layer 34. As can be seen in figure 2 the typical projector 12' used with the screen must have an exit pupil to form the divergent beam 14 of images.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over van de Ven (U.S. Patent No. 4,666,248). Van de Ven teaches the salient features of the claimed invention except for the specific half field of view. It would have been obvious to one of ordinary skill in the art at the time the invention was made to choose the appropriate filed angles, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 2-5 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over van de Ven (U.S. Patent No. 4,666,248) in view of Guzman (U.S. Patent No. 4,184,672). Van de Ven teaches the salient features of the claimed invention except for a square/rectangular aperture, the CRT and pixel structure, and the specific viewing angles. Guzman teaches that round

apertures and square/rectangular apertures were art known equivalents. Because they were art known equivalents, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a square/rectangular aperture instead of a round one.

Van de Ven in view of Guzman teaches the salient features of the claimed invention except for the specific half field of view. It would have been obvious to one of ordinary skill in the art at the time the invention was made to choose the appropriate filed angles, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper, Jr. (U.S. Patent No. 3,580,611) in view of Guzman (U.S. Patent No. 4,184,672). Cooper, Jr. teaches the salient features of the claimed invention except for a square/rectangular aperture, the CRT and pixel structure, and the specific viewing angles. Guzman teaches that round apertures and square/rectangular apertures were art known equivalents. Because they were art known equivalents, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a square/rectangular aperture instead of a round one.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E Mahoney whose telephone number is (703) 305-3475. The examiner can normally be reached on 8:30AM-5PM, Monday-Thursday.

Art Unit: 2851

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read 'Ch E Mahoney', written in a cursive style.

Christopher E Mahoney
Primary Examiner
Art Unit 2851

CM
March 9, 2003